

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

Summary Memorandum

Site ID: WA D009249616
County: King
Priority Assessment: Low
Backlog Red. Cat.:
Date/Revised: 11/1/84

Name and Location:

Lone Star Industries, Inc.
3801 E. Marginal Way S.
Seattle, WA 98134

Contact:
Telephone: (206) 622-2900
Site Status: (X) Active () Inactive () Unknown

Site Description/TSD Activities:

Facility is a cement manufacturer. Spent kiln bricks containing chromium are disposed on site and used as fill with other harmless materials. Some bricks are ground and reused in cement process, coming in contact with water. Wastewater is discharged to holding pond and then reused in process.

Waste Types/Quantities/Characteristics:

Chromium is bonded to kiln bricks and is inert and unreactive at common pH and redox conditions. Wastewater in holding pond has been measured to have up to 0.35 mg/l chromium.

Physical/Social Environment:

Site is in industrial area of Duwamish Waterway. Groundwater is at 5-10 feet below surface in artificial fill material and is tidally influenced. Two parks and no schools within one mile.

Pollutant Mobilization/Pathways/Risk:

Because chromium is bonded to bricks, there is minimal risk of mobilization when bricks are disposed of, at common pH and redox conditions. Wastewater in holding pond may leach to groundwater. Sampling has revealed no contamination of groundwater.

Priority Assessment/Backlog Reduction Category:

Low

Followup Recommendations:

A site visit is recommended on a time-available basis to determine that runoff has all been diverted to process water pond.

USEPA SF



1426389

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT Part 1 - Site Information and Assessment						I. IDENTIFICATION	
						01 State WA	02 Site Number D009249616
II. SITE NAME AND LOCATION							
01 Site Name (legal, common, or descriptive name of site) Lone Star Industries, Inc.				02 Street, Route No., or Specific Location Identifier 3801 E Marginal Way South			
03 City Seattle				04 State WA	05 Zip Code 98134	06 County King	07 County Code 033
09 Coordinates <div style="display: flex; justify-content: space-between;"> Latitude 473500.0 Longitude 1222018.0 </div>				Section/Township/Range NE1/4, Sec. 18, T25N, R4E, WM			
10 Directions to Site (starting from nearest public road)							
III. RESPONSIBLE PARTIES							
01 Owner (if known) Ash Grove Cement West, Inc.				02 Street (business, mailing, residential) 3801 E Marginal Way South			
03 City Seattle				04 State WA	05 Zip Code 98134	06 Telephone Number (206) 6222900	
07 Operator (if known and different from owner) Ash Grove Cement West, Inc.				08 Street (business, mailing, residential) 3801 E Marginal Way South			
09 City Seattle				10 State WA	11 Zip Code 98134	12 Telephone Number (206) 6222900	
13 Type of Ownership (check one) <input checked="" type="checkbox"/> A. Private <input type="checkbox"/> B. Federal: <input type="checkbox"/> C. State <input type="checkbox"/> D. County <input type="checkbox"/> E. Municipal <input type="checkbox"/> F. Other: <input type="checkbox"/> G. Unknown							
14 Owner/Operator Notification on File (check all that apply) <input checked="" type="checkbox"/> A. RCRA 3001, Date Rec'd: 08 / 18 / 80 <input checked="" type="checkbox"/> B. Uncontrolled Waste Site (CERCLA 103c), Date Rec'd: 06 / 23 / 81 <input type="checkbox"/> C. None							
IV. CHARACTERIZATION OF POTENTIAL HAZARD							
01 On Site Inspection By (check all that apply): <input checked="" type="checkbox"/> Yes, Date: 74 / -- / 84 <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA Contractor <input checked="" type="checkbox"/> C. State <input type="checkbox"/> D. Other Contractor <input type="checkbox"/> No <input type="checkbox"/> E. Local Health Official <input type="checkbox"/> F. Other: Contractors Name(s):							
02 Site Status (check one) <input checked="" type="checkbox"/> A. Active <input type="checkbox"/> B. Inactive <input type="checkbox"/> C. Unknown				03 Years of Operation beginning year ending year 1923 Pres <input type="checkbox"/> Unknown			
04 Description of Substances Possibly Present, Known, or Alleged Spent kiln bricks with a chromium content disposed on site and used as fill with other harmless materials. Bricks are inert and unreactive at common pH and redox conditions. Some brick reused in cement manufacturing. Wastewater is recycled through a pond and back into the process.							
05 Description of Potential Hazard to Environment and/or Population Probably little or no hazard. Water in pond used in process with no wastes. However, another seepage pond and storm water drainage from site do not reach process water pond. Unknown if either pond is lined. Drums and fuel pumps reportedly in an unbermed area. Kiln bricks also disposed around facility although these are probably harmless.							
V. PRIORITY ASSESSMENT							
01 Priority for Inspection (check one; if high or medium is checked, complete Part 2 and Part 3) <input type="checkbox"/> A. High (inspection required promptly) <input type="checkbox"/> B. Medium (inspection required) <input checked="" type="checkbox"/> C. Low (inspect on time available basis) <input type="checkbox"/> D. None (no further action needed complete current disposition form)							
VI. INFORMATION AVAILABLE FROM							
01 Contact Ned Therien		02 Of (agency/organization) WDOE			03 Telephone Number (206) 4596352		
04 Person Responsible for Assessment Patricia O'Flaherty		05 Agency N/A	06 Organization JRB Associates	07 Telephone Number (206) 7477899	08 Date 11 / 01 / 84		

D009249616

() M. Not Applicable

WDOE Files
EPA/ERRIS Files

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
Part 3 - Description of Hazardous Conditions & Incidents

I. IDENTIFICATION

01 State

02 Site Number

WA

D009249616

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 (X) A. Groundwater Contamination 02 () Observed (Date:) () Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 None reported or suspected. Sampling of groundwater indicates Cr levels below 0.05 mg/l.

01 (X) B. Surface Water Contamination 02 () Observed (Date:) (X) Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 None reported. Wastewaters are recycled through a pond and then reused in process. WDOE inspections in past revealed some waters not reaching pond. Overflow from seepage pond and storm drains may drain to Duwamish River. Nearest surface water is Duwamish Waterway 1/4 mi W-slope < 1%.

01 (X) C. Contamination of Air 02 () Observed (Date:) () Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 None reported or suspected. Resident population is 8,042 and transient population is 23,670 people within 1 mile of site.

01 (X) D. Fire/Explosive Conditions 02 () Observed (Date:) () Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 No known certified fire/explosive threat.

01 (X) E. Direct Contact 02 () Observed (Date:) (X) Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 None reported or suspected. Process wastewaters are permitted by WDOE and regulated by them. Some process waters may not be circulated to pond although this problem was supposed to be corrected. Kiln bricks not used in cement mfg. are disposed on site and pose no direct contact hazard.

01 (X) F. Contamination of Soil 02 () Observed (Date:) () Potential () Alleged

03 Area Potentially Affected (acres): 0 04 Narrative Description
 None reported or suspected. Kiln bricks disposed on site are inert and unreactive at common pH and redox conditions. Unknown if storage pond with remaining bricks is lined. Native soils are sand, gravel, silts, and clays.

01 (X) G. Drinking Water Contamination 02 () Observed (Date:) () Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 None reported or suspected. Neither local ground nor surface water supplies serve any drinking water needs within 3 miles of site. Groundwater analyses have revealed no Cr contamination.

01 (X) H. Worker Exposure/Injury 02 () Observed (Date:) (X) Potential () Alleged

03 Workers Potentially Affected: Unknown 04 Narrative Description
 None reported or suspected. Spent chrome kiln bricks should pose little or no hazard to employees. Process waters are recycled. Unknown what handling methods used, but little hazard is expected.

01 (X) I. Population Exposure/Injury 02 () Observed (Date:) (X) Potential () Alleged

03 Population Potentially Affected: 0 04 Narrative Description
 None reported or suspected. Perhaps most significant potential is fate of wastewaters that did not recirculate to pond used in processing. According to WDOE files all side streams were to be directed toward pond in 1983. If this has occurred, there is no risk to population.

**POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT**
Part 3 - Description of Hazardous Conditions & Incidents

I. IDENTIFICATION

01 State	02 Site Number
WA	D009249616

II. HAZARDOUS CONDITIONS AND INCIDENTS (continued)

01 (☒) J. Damage to Flora 02 () Observed (Date:) () Potential () Alleged

04 Narrative Description
None reported or suspected.

01 (☒) K. Damage to Fauna 02 () Observed (Date:) () Potential () Alleged

04 Narrative Description (include name[s] of species)
None reported or suspected.

01 (☒) L. Contamination of Food Chain 02 () Observed (Date:) () Potential () Alleged

04 Narrative Description
None reported or suspected.

01 (☒) M. Unstable Containment of Wastes 02 () Observed (Date:) (☒) Potential () Alleged

(spills/runoff/standing liquids/leaking drums)

03 Population Potentially Affected: 04 Narrative Description

WDOE inspections state process waters collected in pond and reused. Overflow from seepage pond and runoff from plant did not go to pond as of 1983. Gas, diesel pump, and drums are not contained in a bermed area.

01 (☒) N. Damage to Offsite Property 02 () Observed (Date:) (☒) Potential () Alleged

04 Narrative Description
None reported or suspected. Potential damage from seepage pond and runoff is probably minimal. Unknown if either pond is lined.

01 (☒) O. Contamination of Sewers, Storm Drains, WWTPs 02 () Observed (Date:) (☒) Potential () Alleged

04 Narrative Description
None reported. Potential runoff from south side of facility and seepage pond overflows could impact local surface waters. Unknown if process water pond is lined.

01 (☒) P. Illegal/Unauthorized Dumping 02 () Observed (Date:) () Potential () Alleged

04 Narrative Description
None reported or suspected.

05 Description of Any Other Known, Potential, or Alleged Hazards
None known.

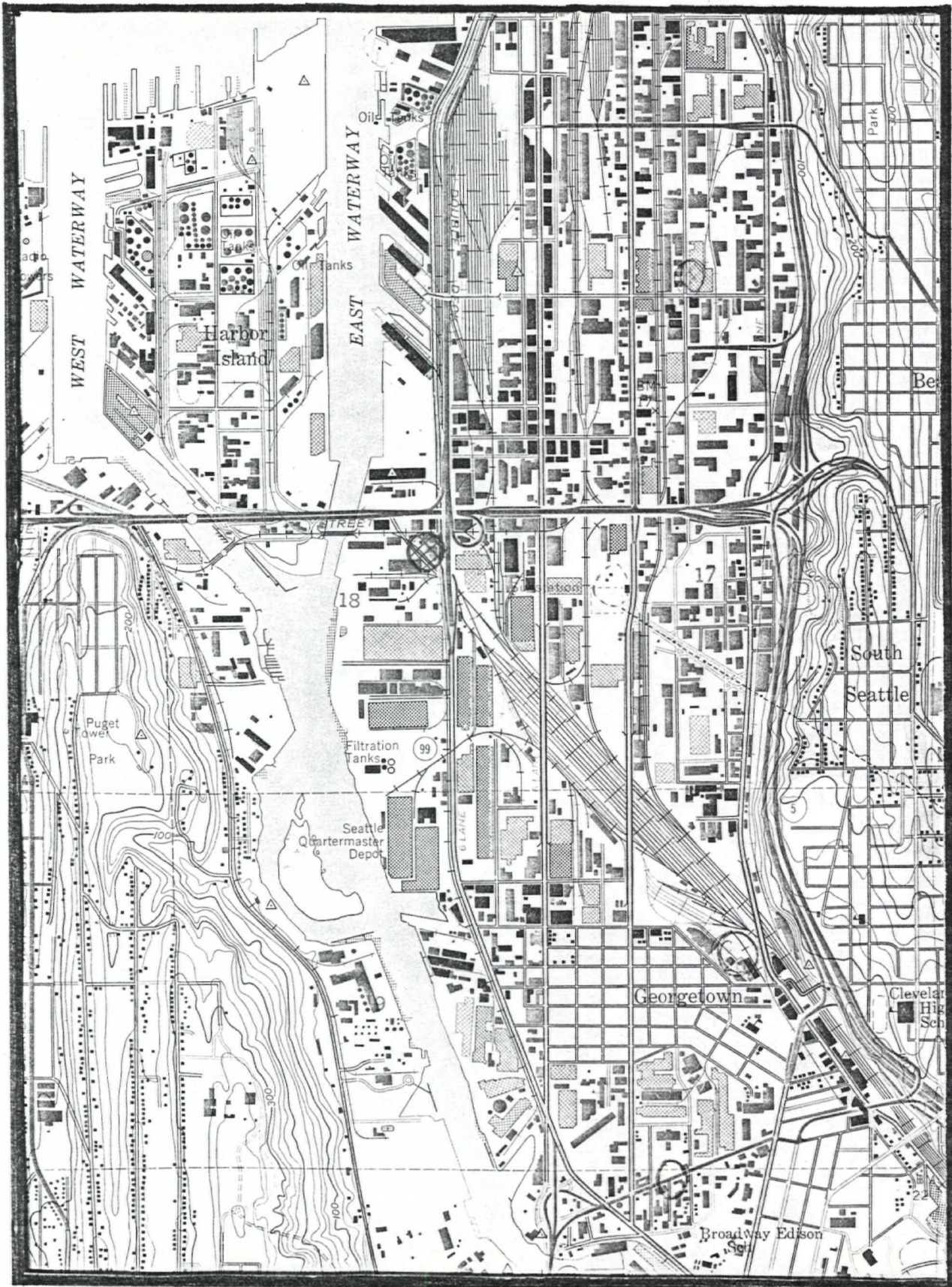
III. TOTAL POPULATION POTENTIALLY AFFECTED:

IV. COMMENTS

Bricks disposed on site are inert and unreactive at common pH and redox conditions and this should pose no environmental health risk. Bricks reused in cement manufacturing are potential source of Cr contamination to groundwater, surface waters, or soils although the wastewaters are mostly used in process & GW analyses revealed no Cr contamination.

V. SOURCES OF INFORMATION (cite specific references: state files, reports, etc.)

WDOE Files; Water Supply Bulletin #28; EPA/ERRIS Files; USGS Seattle South Quad; PSCOG, 1984; Geohydrological Monograph #5; 1980 Fed. Census; DSHS Computer Files



T.25N

R.3E | R.4E



LONE STAR INDUSTRIES INC.

SEC 18

U. S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
DATA BASE UPDATED 84/02/02
T.1 - ERRIS TURNAROUND DOCUMENT

PAGE: 434
RUN DATE: 84/02/02
RUN TIME: 20:32:07

EPA ID NO.: WAD009249616 SHEET 03

SITE NAME: LONE STAR INDUSTRIES, INC

RE COMMENTS

(ACTION - FOR
DATA ENTRY USE ONLY)

COMMENT
NUMBER

COMMENT

_

001

A SMALL AMOUNT OF HEXAVALENT CHROME, AVERAGE 40 PPM, IS CONTAINED IN

_

002

CERTAIN DISCARDED KILN BASIC BRICK. COMBINED WITH OTHER WASTE BRICK

_

003

TYPES, OVERBURDEN AND HARMLESS WASTE MATERIALS. THIS MATERIAL WAS

_

004

DISCARDED THROUGHOUT VARIOUS AREAS OF PROPERTY AS FILL, ON SPOIL PILES

_

005

ETC. HEXAVALENT CHROME THUS DISCARDED WAS 1-1.5 LBS PER KILN, PER

_

006

YEAR, OR .004% BY WEIGHT OF THE WASTED KILN BRICK. SAMPLING OF

_

007

GROUNDWATER AND TESTING FOR CHROME INDICATES LEVELS LESS THAN DRINKING

_

008

WATER STANDARDS AT 0.05MG/L. AMOUNT OF DISCARDED MATERIAL IS

_

009

UNDEFINED. NOT ENOUGH INFORMATION IN FILE TO MAKE A JUDGEMENT ABOUT

_

010

THIS SITE. RECOMMEND FURTHER REVIEW.

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_

_



OREGON PORTLAND CEMENT COMPANY
INCORPORATED 1915

3801 EAST MARGINAL WAY, SOUTH
SEATTLE, WA 98134
(206) 623-5596

May 25, 1984

State of Washington
Department of Ecology
Northwest Regional Office
4350-150th Avenue N.E.
Redmond, WA 98052

To whom it may concern:

This is a formal request to transfer the State Waste Discharge Permit #5162 previously issued to Lone Star Industries, Inc., 3801 E. Marginal Way South, Seattle, to the new plant owner/ name Ash Grove Cement West, Inc., 3801 E. Marginal Way South, Seattle.

This transfer is requested due to the sale of the plant March 23rd of this year.

Sincerely,

Nathan A. Fernow
Chief Chemist

NAF:1mb

RECEIVED
MAY 29 1984
DEPARTMENT OF ECOLOGY
NORTHWEST REGION

TELEPHONE RECORD

RETURNED CALL:

CALLED BY:

CALLED:

Mr/Mrs

Nate Fernow

Telephone 467-1408

Date

5-22-84

Time

9:30 AM

of

Oregon Portland Cement Company

formerly Lone Star Cement

seen to be Ash Grove Cement West

Incorporated (Name changes June 1, 1984)

Representing

Project

NPDES permit renewal

Discussed

Name/Ownership change. - Permit should be issued as Ash Grove Cement West

Incorporated, same address. Contact person

will be Nathan Fernow, Chief Chemist; Plant manager is still Ken Roan.

The plant will not operate the Kiln during the next 12 months, possibly longer. Clinker will be obtained from other plants such as Ash Grove's Oregon facility. Otherwise the plant will operate as usual (Cement mfg. from clinker, shipping, sales, etc.)

Plant may be upgraded in 3-4 years.

Ash Grove will give proper notification if this does take place.

TELEPHONE RECORD

RETURNED CALL:

CALLED BY:

CALLED:

Mr/Mrs Nathan Fernow

Telephone 467-1408

Date 1-23-84

Time _____

of Lone Star Industries
Seattle

Representing _____

Project _____

Discussed Laboratory results from sampling (12-14-84). Mr. Fernow stated the high pH is a result of limestone used in cement. High Chromium (0.35 mg/l. pond) would be caused by chrome bonded brick used to line kiln. When a kiln is re-lined, the used brick is saved and slowly added to the cement in production. The bricks cannot be disposed of to a land fill, because of the high chrome content.

Mr. Fernow requested a copy of the results be sent to him. These will be mailed 1-26-84.

Signed

B.H. Smith

Date

1-25-84

COPIES TO:
B Smith

4, 4, 4

B. Smith

BGS.

COPIES TO:

G. BRUGGER

PROGRAM NUMBER 444

[illegible]

Issuance Date: _____
Expiration Date: _____

STATE WASTE DISCHARGE PERMIT

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504

*Also:
Lone Star Industries
Oregon Portland Cement*

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington as amended

ASH GROVE CEMENT WEST INCORPORATED
3801 E. Marginal Way South
Seattle, Washington 98134

Plant Location:

3801 E. Marginal Way South
Seattle, Washington

Receiving Water:

Ground Water and Duwanish River

Industry Type:

Cement Manufacturing

Discharge Location:

On site via seepage

Waterway Segment Number:

04-09-09

is authorized to discharge in accordance with the special
and general conditions which follow.

ROBERT K. MCCORMICK, Regional Manager
Department of Ecology (M)

S1. EFFLUENT LIMITATIONS

Upon issuance of this permit and lasting until the expiration date, the permittee is authorized to discharge truck rinse water and cooling water to the Duwamish River via ground water subject to the following conditions:

- a. Flow to the surge pond shall not exceed 214,100 gallons per day.
- b. All contaminated waters are to be collected and used as process water or discharged to the surge pond to enter the Duwamish River via sub-surface seepage.
- c. The discharge to state waters must have the following characteristics:
 1. pH range between 6.5 and 8.5;
 2. Oil and grease shall not exceed 15 ppm (no visible oils)
 3. Turbidity shall not exceed 10 NTU over natural conditions in the Duwamish River.

S2 MONITORING

If the permittee or other agent wishes to monitor the parameters listed in Special Condition S1, he shall do so in accordance with the following requirements:

a. Representative Sampling

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge.

b. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the department, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136, as published in the Federal Register on December 1, 1976, or the latest revision thereof, which currently references the following publications:

1. American Public Health Association, Standard Methods for the Examination of Water and Wastewaters.
2. American Society for Testing and Material, A.S.T.M. Standards, Part 23, Water, Atmospheric Analysis.
3. Environmental Protection Agency, Methods for Chemical Analysis of Water and Wastes.

S2. MONITORING (Continued)

c. Recording of Results

For each measurement or sample taken, the permittee shall record the following information: (1) the date, exact place, and time of sampling; (2) the dates the analyses were performed; (3) who performed the analyses; (4) the analytical techniques or methods used; and (5) the results of all analyses.

S3. SOLID WASTE DISPOSAL

- a. The permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface waters.

S4. OPERATION AND MAINTENANCE

The pier shall be maintained to minimize spillage from loading and off loading operations.

- a. Materials spilled on the loading pier shall be swept or otherwise removed from the area to prevent their entry to state surface waters.
- b. Hydraulic cleaning of this area shall not be permitted unless materials are of a nature that endanger property or human life.

Permit No. 5162

Issuance Date 1-17-78

Expiration Date 1-17-83

STATE WASTE DISCHARGE PERMIT

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 RCW as amended

LONE STAR INDUSTRIES, INC.
3801 E. Marginal Way South
Seattle, Washington 98134

Plant Location:

3801 E. Marginal Way South
Seattle, Washington 98134

Receiving Water: Ground Water and
Duwamish River

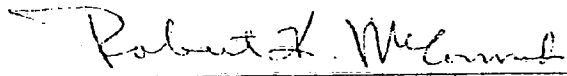
Discharge Location: On Site Via Seepage

Industry Type:

Cement Manufacturing

Waterway Segment Number: 04-09-09

is authorized to discharge in accordance with the special
and general conditions which follow.


ROBERT K. MCCORMICK, Regional Manager
Department of Ecology (M)

S1. EFFLUENT LIMITATIONS

Upon issuance of this permit and lasting until the expiration date, the permittee is authorized to discharge to the Duwamish River and Ground Water subject to the following conditions:

- a. Flow shall not exceed 214,100 gallons per day.
- b. All contaminated waters are to be collected and used as process water or discharged to the surge pond to enter the Duwamish River via sub-surface seepage.
- c. The discharge to state waters must have the following characteristics:
 1. pH range between 6.5 and 8.5;
 2. No visible oils;
 3. Turbidity shall not exceed 10 JTU over natural conditions in the Duwamish River.

S2. OPERATION AND MAINTAINENCE

The pier shall be maintained to minimize spillage from loading and off loading operations.

- a. Materials spilled on the loading pier shall be swept or otherwise physically removed from the area to prevent this material from entering the surface waters of the state.
- b. Hydraulic cleaning of this area shall not be permitted unless materials are of a nature that endanger human life or property.

DEPARTMENT OF ECOLOGY

INSPECTION REPORT

To files Inspector B. Smith
Date of Visit 7-1-82 Permit No. State 5162
Name of Entity Lonestar Cement ^{East} Marginal Permit Expires 1-17-83
City Seattle County King New Industry _____
Person Contacted: Ken Bean (Second contact - Lloyd Coslett)
Type of Facility Cement manufacturing (Phone 623-5596)
Receiving Water ground water
Type of Treatment System none

Hon ~~XXXX~~ Rhaki
X 412
Operations
~~XXXXXXXXXX~~
467-1412

Operation Satis X Fair _____ Unsatis _____

Does not comply with permit conditions

Describe Storm drainages from south of the
shop area still does not go to the pond.
(See inspection report RC Devitt 10-13-77 1-15-78)
Remoff from this area (paved) and area west
of shop (unpaved) drains to a ^{separate} seepage
"pond" approximately 150' west of the shop.
Oil drums in use and storage for stock
drums is along the west side of the shop
(unpaved area). No berm or containment
at present. Waste oil from all operations
is disposed to the "slurry" and is burned
as fuel during the firing process at
about 3000° F.
Seepage pond area looks good. Some oil on

Surface which will eventually be burned with slurry in recirculation system. No change in cooling water or slurry system since 1977 ~~45~~ inspection.

Make up water for slurry comes from tank located west of Mill Building. If water level gets low, water is pumped from seepage pond to tank for use in slurry. During summer months, pond dries up and city water is used in slurry.

Machinery cooling is once through (city water) discharged to the seepage pond.

All storm water runoff for the site, including truck wash and dust control water is collected and pumped (older section of plant built 1928) or flows (newer section of plant built 1969) to the seepage pond or the tank. (make-up water).

DEPARTMENT OF ECOLOGY

INSPECTION REPORT

To Ken M. FilesInspector Re DavittDate of Visit 10-13-77Permit No. 2379Name of Entity LONG STAR Cement ^{East} _{marginal}Permit Expires 1/15/79City Seattle County King

New Industry _____

Person Contacted Gary Batey, Plant Engr. Ma 3-5596Type of Facility Cement manufacturingReceiving Water Duwamish R.Type of Treatment System Recycling - closed systemOperation Satis ✓ Fair _____ Unsatis _____Does ~~not~~ comply with permit conditions

Describe Conditions similar to Ken M's inspection 1-15-75.
all industrial H₂O goes to pond and
is reused. Occasional oil gets in system
but does not effect efficiency of re use
or quality of product. The pond is still
flourish-green colored. Storm drainage
from south of the shop area does not go to
the pond, but will be intercepted in future.
Presently it drains toward the river. It is
not known if it actually reaches the river
or in what quantity of it does. There
is a gas pump & diesel tank in shop area
that should be curbed.

Gary and I discussed the company's expired
permit & procedures for obtaining a new one.
OVER

The company would have liked to have not been required to have one.

We discussed also the fact that limited seepage did enter either ground H₂O or the Duwamish & that storm H₂O did run off from the pier in the loading-unloading area.

I agreed to send him a short letter pointing out that their permit had expired and that it was necessary to request renewal & we would send ~~of~~ new applications.

Their production, water usage etc has changed considerably.

As far as the increased production. They are buying clinkers from Japan & Canada & bringing them in by barge as they don't have the capabilities on site of producing enough to meet production demands.

10/14 - Sent letter directing him to request renewal.

DEPARTMENT OF ECOLOGY

INSPECTION REPORT

To ^{TQM} TOM MCCANN & FILES Inspector KEN MAUERMAN
Date of Visit 5/15/74 Permit No. 3279
Name of Entity LOVE STAR CEMENT CORP. (EAST MARGINAL PLANT) Permit Expires 1/15/75
City SEATTLE County KING PHONE MA3-5596 New Industry _____

Person Contacted GARY BATEY, PLANT ENGR.
Type of Facility CEMENT PLANT
Receiving Water DUWAMISH RIVER
Type of Treatment System RECYCLING SYSTEM WITH AN EMERGENCY OVERFLOW POND.

Operation Satis _____ Fair X Unsatis _____

Does ~~not~~ comply with permit conditions

Describe AN NPDES PERMIT IS NOT REQUIRED. ALL WATER IS COLLECTED AND INCORPORATED INTO MAKE-UP WATER. AN EMERGENCY OVERFLOW POND RECEIVES WATER FROM THE MAKEUP TANK DURING EXTREMELY HEAVY RAINS. THE POND ALSO RECEIVES WATER FROM A TRUCK PILING STAND AT THE PLANT ENTRANCE - NO DETERGENTS ETC ARE USED. STORM RUNOFF FROM THE COMPANY PIER ENTERS THE RIVER HOWEVER. THIS PIER IS KEPT CLEAN BY REGULAR SWEEPING AND WAS QUITE CLEAN THE DAY OF THIS INSPECTION. THE OVERFLOW POND LEACHES TO THE RIVER AS PERMIT ALLOWS. POND WILL BE SAMPLED TO DETERMINE SOURCE OF ITS YELLOW-GREEN COLOR. SAMPLING WILL BE CONDUCTED TO DETERMINE cc pH AND HEAVY METAL CONTENT (Cu, Ni, Mg) ON 5/20/74.

MEMORANDUM

CHECK
INFORMATION _____
FOR ACTION _____
PERMIT _____
OTHER _____

TO: Ken Mauermann, Files
FROM: Laurence Ashley
SUBJECT: LONE STAR CEMENT COMPANY, SEATTLE

DATE: May 23, 1974

State of
Washington
Department
of Ecology



A water sample from the outfall from a settling pond
at Lone Star Cement Company on May 20, 1974, was delivered
to the laboratory for chemical analysis. The results:

SAMPLE	pH	Cu	Ni
		---mg/l---	
Leachate to Duwamish	10.7	<01	<.1

LA:js
5-23-74 dt

*A copy of this sent to
Gary Batey
Lone Star Plant Engr.
5/24/74*

WASTE DISCHARGE PERMIT
Application Form

For Office Use Only
New Permit _____ Type _____
Expired _____ Permit No. _____
Drainage Basin _____ Rec'd _____
Advertising Needed _____ Issued _____
Expired _____

Application is hereby made for a permit to discharge wastes into state waters and/or municipal sewerage systems in accordance with Chapter 90.48 RCW and Chapter 372-24 WAC.

- A. NAME OF COMPANY LONE STAR INDUSTRIES, INC.
- B. MAILING ADDRESS 3801 E. MARGINAL WAY S., SEATTLE, WA. 98134
- C. PLANT LOCATION (SAME ADDRESS AS ABOVE)
- PHONE 623-5596 CONTACT PERSON LEE B. BECKHAM
- D. TYPE OF INDUSTRY MANUFACTURE OF PORTLAND CEMENT
- E. WASTE FLOW: (Submit on separate sheet)

Describe in detail the sources, treatment and disposal of all liquid wastes at the plant, including water-process air pollution control equipment. Include a schematic flow diagram showing the sources and flow pattern of all wastes.

- F. SOLID WASTE DISPOSAL: (Submit on separate sheet)

Describe the types of solid wastes accumulated at the plant and list the source, volume, storage provision, frequency of removal, and final disposal of each solid waste. Include all sludges, dusts, scraps, trimmings and left over, spoiled or returned products.

- G. WATER SUPPLY:

- ☐ Private well
- ☐ Surface Water N/A
(name of waterway)
- ☒ Public System SEATTLE WATER DEPARTMENT
(name of system)

Recorded Water Right No. _____

Recorded Water Right No. _____

Location of private well or plant surface water intake; Section _____ Township _____ Range _____

- H. WASTEWATER DISPOSAL:

Maximum Gallons/Day

- ☐ To Land or Subsurface Ground Disposal
- ☐ To Surface Waterway _____
(name of waterway)
- ☒ To Sanitary Sewerage System SEATTLE
WATER DEPT. (COMBINED UTILITY) (name of municipal system)

900

Location of Discharge Point(s) and/or Connection(s) to Municipal Sewer System:

FOR LOCATIONS OF TWO SANITARY SEWER DISCHARGE CONNECTION POINTS TO MUNICIPAL SEWER

SYSTEM REFER TO GRIDS S1075/W 3010 AND S1450/W3010 ON LSI DWG. I-WS-L-9.

WATER SUPPLY VOLUMES
 Private Well
 Surface Water
 Public System

Average Gallons/Day Maximum Gallons/Day

165,000	215,000
165,000	215,000

TOTAL

J. WASTEWATER AND WATER UTILIZATION:
 Sanitary Wastes

Average Gallons/Day	Maximum Gallons/Day
700	900

Industrial Wastewater

RECLAIMED IN THE SLURRY

Cooling Water Discharge

RECLAIMED IN THE SLURRY-

Water Incorporated into Product

N/A

Evaporative Loss

164,300

214,100

Other (Specify)

TOTAL

165,000

215,000

Check for Equality

K. EFFLUENT ANALYSIS: (Submit on separate sheet)

List the physical and chemical properties of the effluent(s) to be discharged, and include a description of the sampling and analytical methods used to derive this information.

N/A - NO EFFLUENT DISCHARGED INTO WATERWAY.

L. PLANNED WASTE TREATMENT IMPROVEMENTS: (Submit on separate sheet)

Describe any additional treatment or changes in waste disposal methods in planning or under construction.

NONE

M. STORMWATER TREATMENT AND CONTROL:

☒ No Treatment

☐ Treated Stormwater to Waterway

 (name of waterway)

Contaminated Stormwater to Sanitary Sewer

☐ Size of Intercepted Area

--- sq. ft.

Type of Treatment

☐ Settling or Sedimentation

☐ Screening or Filtration
 N/A

☐ Separation or Flotation

Type of Treatment

☐ Settling or Sedimentation

☐ Screening or Filtration
 N/A

☐ Separation or Flotation

N. PLANT OPERATION:

Days per Year

Number of Employees per Shift
Day Night Swing

Average

365

71

12

15

Maximum

365

71

12

15

O. RAW MATERIALS AND CHEMICALS USED IN PROCESSES:

Brand Name

Chemical, Scientific or
Actual Name

Quantity Used per Day *
Average Maximum

LIMESTONE

LIMESTONE

700 TONS/DAY

1,000 TONS/DAY

SANDSTONE

SANDSTONE

105 TONS/DAY

150 TONS/DAY

BLAST FURNACE

SLAG

35 TONS/DAY

50 TONS/DAY

SLAG

COAL

COAL (BITUMINOUS)

240 TONS/DAY

250 TONS/DAY

P. PRODUCTION:

Item

Quantity Produced Per Day *
Average Maximum

CEMENT (ALL TYPES)

1250 TONS/DAY

2880 TONS/DAY

Q. EXPLAIN ANY SEASONAL VARIATION IN WASTE DISCHARGE VOLUMES, PLANT OPERATIONS, RAW MATERIALS AND CHEMICALS USED IN PROCESSES, AND/OR PRODUCTION: NOT APPLICABLE

The information given on this application is complete and accurate to the best of my knowledge.

Lee B. Beckham

Signature

LEE B. BECKHAM

Printed

ASST. PLANT MANAGER - E&M

Title

DECEMBER 13, 1977

Date

*Please specify units. For example: Tons per day, pounds per day, barrels per day.

F.

SOLID WASTE DISPOSAL

1. LUMBER, PAPER, ETC. - LOADED INTO COMMERCIAL DISPOSAL VANS AND HAULED AWAY
2. BRICK, CONCRETE, WASTE CEMENT, DUST, ETC. - USED AS A LANDFILL IN AREA ADJACENT TO BUT NOT INTO THE RIVER.
3. METALS - DISPOSED OF AS SCRAP.

EPA Notification of Hazardous Waste Site

United States
Environmental Protection
Agency
Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name Lone Star Industries, Inc.
Street One Greenwich Plaza
City Greenwich State CT Zip Code 06830

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site Lone Star Industries, Inc.
Street 3801 E. Marginal Way South
City Seattle County King State WA Zip Code 98134

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) Reid, M. Michael, Vice President
Phone (203) 661-3100 Manufacturing

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year) 1952 To (Year) 1980

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item 1—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☐ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☒ Other (Specify)

Chrome

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☒ Other (Specify)

Kiln Brick

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

RECEIVED

JUN 23 '81

Solid Waste Div.
EPA Region X

Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☒ Other (Specify) Dumped with other material

Total Facility Waste Amount

cubic feet

gallons

Total Facility Area

square feet

acres

Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items Hand I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

A small amount of hexavalent chrome averaging approximately 40 ppm is contained in certain discarded kiln basic brick. This brick was combined with other type waste brick, overburden and harmless waste materials and discarded throughout various areas of plant property as fill, on spoil piles, etc. The total amount of hexavalent chrome thus discarded was approximately 1 to 1 1/2 pounds per kiln per year representing about 0.004% by weight of the wasted kiln basic brick. Samplings of ground waters in a few areas where the subject brick was known to have been discarded tested for total chrome at levels less than drinking water standards at 0.05 mg/l.

Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required

Name

Street

City

State

Zip Code

Signature

Date

- ☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

M. Michael Reed 6/9/81

ATTACHMENT B
RCRA Section 3012 Preliminary Assessment Program
Surface and Groundwater Hydrology

Prepared for JRB Associates by Geo/Resource Consultants

Site Name LOPE STAR INDUSTRIES INC. County KING

- Sources:
1. GEOHYDROLOGIC MONOGRAPH 5
 2. U.S.G.S. QUAD (SEATTLE SOUTH)
 3. Water supply bulletin No. 20
 - 4.
 - 5.
 - 6.
 - 7.
 8. Well logs used: ELLIOT BAY MILL CO. 24/41-18B1

GROUNDWATER

Name/description of aquifer of concern

GLACIAL DRIFT UNCONSOLIDATED SAND, GRAVEL, SILT & CLAY
PARTIALLY CONSOLIDATED TILL

Source 1

Depth from the ground surface to the highest seasonal level of the saturated zone of the aquifer of concern

6.0'

well at same elevation as site.

Source 3, 8

Soil type and permeability in unsaturated zone

Very thick clay and hard shale layer 197.0'
impermeable

Source 3, 8

Use(s) of aquifer of concern within a 3-mile radius of the hazardous substance.
If available, indicate up-gradient or down-gradient

NO USE

Source _____

Location (Distance, Up/Down Gradient) of nearest well drawing from aquifer of concern or occupied building not served by a public water supply

1/4 mile to the North West

SAME ELEVATION

Source 3, 2

Identified water-supply well(s) drawing from aquifer of concern within a 3-mile radius of the hazardous substance and population served by each well

Public: NONE

Private: NONE

Source _____

Land area (in acres) irrigated by supply well(s) drawing from aquifer of concern within a 3-mile radius of the hazardous substance

NONE

Source _____

SURFACE WATER

Name/description, distance, and gradient (range c/o) to nearest downslope surface water if within three miles

DOWANISH WATER WAY, 1/4 mile, 0%
TO THE WEST

Source 2

Use(s) of surface water within 3-miles (free-flowing water) or 1-mile (static water) of the hazardous substance

COMMERCIAL
INDUSTRIAL
RESERVOIR

Source 2

Location of water-supply intake(s) within 3-miles (free-flowing water) or 1-mile (static water) downstream of the hazardous substance and population served by each intake

NONE

Source _____

Land area (in acres) irrigated by supply well(s) within 3-miles (free-flowing water) or 1-mile (static water) downstream of the hazardous substance

NONE

Source _____

Distance, in stream miles, to intakes cited in previous two items

N/A.

Source _____

Well No.	Owner or tenant	Altitude (feet)	Type of well	Depth of well (feet)	Diameter of well (in)	Depth of casing (feet)	Character of water-bearing material	Below land surface (feet)	Date	Type	Horsepower	Use of water	Remarks
T. 24 N., R. 4 E. -- Continued													
12H4	--- Havlund	200	Dg	85	36	----	-----	36.46	2-20-51	J	3/4	N	Formerly domestic well.
12H5	--- Soltero	225	Dg, Dr	200	36-6	200	Sand	125	2-20-51	--	---	De	
12J1	D. L. Duckey	265	Dg	35	24	35	----Do----	26.56	2-20-51	J	3/4	D	Dd 7 ft after pumping 2½ hr at 15 gpm; L. Dd 5 ft pumping 600 gpm; C, L.
12M1	Mercer Island Coop. Water Assoc.	270	Dg	62	20	62	Sand and gravel	29.52 36	9-10-51 3-1-51	T	20	PS	
13B1	W. E. Varns	200	Dr	100	8	100	Sand	60	-----	T	2	N	Formerly supplied 12 families. L. Aquifer overlain by clay and till. Yield inadequate.
13B2	L. Voullis	200	Dr	70	6	65	----Do----	50	-----	--	---	D	
13H1	Carl Stroud	210	Dr	225	6	----	-----	195	-----	J	5	D	
13J1	Ivan Kearns	175	Dg	69	38	69	Silt	28.30	2-27-51	J	½	D	L.
17A1	Seattle Eng. Dept., test hole 5	238.1	Dr	75	----	----	Sand	-----	-----	--	---	De	
17C1	Washington State Highway Dept., test hole	15	Dn	91	----	----	-----	-----	-----	--	---	De	L.
17F1	Seattle Eng. Dept., test hole 14	12	Dr	68	----	----	-----	-----	-----	--	---	De	L.
17H1	Do., test hole 8	260.8	Dr	35	----	----	-----	-----	-----	--	---	De	L.
17J1	Do., test hole 10	254	Dr	92	----	----	Sand	-----	-----	--	---	De	L.
17L1	Seattle Eng. Dept., test hole 19	3	Dr	74	----	----	-----	-----	-----	--	---	De	L.
17M1	Do., test hole 7	6	Dr	74	----	----	-----	-----	-----	--	---	De	L.
17P1	Do., test hole 26	15	Dr	72	----	----	-----	-----	-----	--	---	De	L.
18B1	Elliott Bay Mill Co.	10	Dr	1,550	24-6	1,550	Sand and gravel	6	1951	T	20	N	Dd 170 ft after pumping 3 hr at 100 gpm; L. L.
18Q1	Seattle Eng. Dept., test hole 1	5	Dr	96	----	----	-----	-----	-----	--	---	De	
19H1	Liquid Carbonic Corp.	15	Dr	631	10-8	260	Sand	13.98 10.94	9-16-53 8-17-59	N	---	N	Dd 46 ft pumping 235 gpm; C, H, L. L.
20N1	Washington State Highway Dept., test hole 1	6	Dr	153	----	----	-----	-----	-----	--	---	De	
25B1	E. W. Rudow	80	Dr	130	6	----	Gravel	30	2-27-51	P	2	D	L. Dd 50 ft pumping 10 gpm. L. Slight dd after pumping 40 min at 25 gpm; L. Aquifer overlain by till. -----Do-----
25B2	H. W. McCurdy	50	Dr	114	6	113	Sand and gravel	21	2-27-51	--	---	D	
25B3	E. R. Hinton	75	Dr	128	6	128	----Do----	60	2-27-51	J	2	D	
25K1	W. J. Galletly	265	Dr	45	6	45	----Do----	14.30	5-10-51	J	½	D	Penetrates 147 ft of till. Supplies 2 houses. Yields 40 gpm; C, L.
25K2	E. L. Collingham	265	Dr	40	6	40	----Do----	-----	-----	J	½	D	
25L1	H. Packard	115	Dg	22	36	----	Sand	6.76	3-2-51	P	½	D	Dd 170 ft after pumping 3 hr at 100 gpm; L. L.
25L2	Keene Bettinger	200	Dg	147	36	----	Till	138.83	3-2-51	J	1	D	
25Q1	H. L. Marshall	275	Dr	175	6	----	-----	-----	-----	P	3/4	D	Yield inadequate in summer. High bacteria count.
25R1	Mercer Island School Dist. 400	350	Dr	154	6	154	-----	140	4-11-58	T	3	PS	
29D1	Washington State Highway Dept., test hole 6	2	Dr	216	----	----	-----	-----	-----	--	---	De	L.
30H1	Do., test hole 9	-26	Dr	190	----	----	-----	-----	-----	--	---	De	L.
30J1	Do., test hole 17	10	Dr	148	----	----	-----	-----	-----	--	---	De	L.
30J2	Do., test hole 15	7	Dr	121	----	----	-----	-----	-----	--	---	De	L.
36A1	J. W. Elkins	160	Dg	60	----	----	-----	-----	-----	--	---	D	Yield inadequate in summer. High bacteria count.
36A2	John Stenhouse	210	Dg	20	30	20	Sand	0.38	3-2-51	P	1/6	D	

Table 7.--Drillers' logs of wells in northwest King County, Wash.--Continued

Material	Thickness (feet)	Depth (feet)
Well 24/4-17L1		
Seattle Engineering Dept., test hole 19. About 2,300 ft N. and 2,900 ft W. of SE cor. Altitude about 3 ft.		
Sand, medium to coarse, traces of silt -----	40	40
Sand, medium to coarse, clay lenses -----	5	45
Sand, medium to fine, clay lenses -----	7	52
Sand, clayey -----	6	58
Clay, fine sand, and gravel -----	7	65
Clay, blue, coarse sand, and gravel -----	3	68
Sand, coarse, and gravel -----	3	71
Clay, blue -----	3	74

Well 24/4-17M1

Seattle Engineering Dept., test hole 7. About 1,300 ft N. and 5,100 ft W. of SE cor. Altitude about 6 ft.

Sand, medium to coarse -----	11	11
Clay and silt -----	2	13
Clay, soft -----	1	14
Sand, fine -----	5	19
Sand, coarse -----	15	34
Sand, medium to fine -----	2	36
Sand, coarse, and wood -----	10	46
Sand, medium to coarse -----	17	63
Sand, medium to fine -----	11	74

Well 24/4-17P1

Seattle Engineering Dept., test hole 26. About 350 ft N. and 2,850 ft W. of SE cor. Altitude about 15 ft.

Sand, coarse -----	36	36
Clay, blue-gray -----	6	42
Sand, clayey -----	7	49
Clay, sand, and gravel -----	5	54
Sand, coarse, and gravel -----	15	69
Clay, sand, medium gravel -----	3	72

Well 24/4-18B1

Elliott Bay Mill Co. About 1,300 ft S. and 2,850 ft E. of NW cor. Altitude about 10 ft.

Sand -----	165	165
Gravel, cemented -----	95	260
Clay, blue -----	70	330
Clay and gravel -----	105	435
Gravel -----	23	458
Clay -----	12	470
Gravel -----	30	500
Gravel, cemented -----	45	545
Gravel -----	17	562
Boulders, bedded in clay -----	213	775

GROUND WATER

Table 7.--Drillers' logs of wells in northwest King County, Wash.--Continued

Material	Thickness (feet)
Well 24/4-18B1--Continued	
Sand -----	20
Clay with boulders -----	145
Clay, sandy -----	60
Sand, coarse -----	30
Clay and hard shale -----	197
Clay, soft -----	8
Shale, hard -----	8
Sand, coarse -----	3
Shale and boulders -----	69
Sand, coarse -----	104
Sand, hard -----	19
Gravel, cemented -----	12

Casing: 24-inch to 53 ft, 20-inch to 170 ft, 10-inch from 165 to 510 ft, 8-inch from 1,020 ft, 6-inch from 1,010 to 1,550 ft; perforated 410 to 510 ft, 980 to 1,020 ft to 1,550 ft.

Well 24/4-18Q1

Seattle Engineering Dept., test hole 1. About 450 ft N. and 3,500 ft E. of SW cor. about 5 ft.

Gravel and coarse sand -----	8
Sand, coarse -----	5
Sand, fine to medium -----	32
Sand, fine, trace of silt -----	12
Sand, medium to fine -----	39

Well 24/4-19H1

Liquid Carbonic Corp. About 140 ft S. and 140 ft W. of center of intersection of Colorado Ave. Altitude about 15 ft. Drilled by N. C. Janssen Drilling Co., 1911.

Sand -----	250
Clay -----	62
Shale -----	319

Casing: 10-inch to 76 ft, 8-inch from 0 to 260 ft; perforations from 40 ft to 250(?) ft.

Well 24/4-20N1

Washington Highway Dept., test hole 1. About 350 ft N. and 50 ft E. of SW cor. Altitude about 6 ft.

Sand, medium, brown -----	9
Sand, medium, black, some gravel -----	7
Sand, medium to coarse, black, some gravel -----	17
Sand, medium to fine, black, some silt -----	39
Silt, gray -----	4
Sand, fine, black, silt layers -----	10
Sand, medium to fine, and sandy silt -----	16
Sand, medium to fine -----	18
Sand, fine, silty -----	33

--Drillers' logs of wells in northwest King County, Wash.--Continued

Material	Thickness (feet)	Depth (feet)
Well 24/4-17L1		
Engineering Dept., test hole 19. About 2,300 ft N. and 2,900 ft W. of SE cor. Altitude 10 ft.		
Medium to coarse, traces of silt	40	40
Medium to coarse, clay lenses	5	45
Medium to fine, clay lenses	7	52
Clayey	6	58
Fine sand, and gravel	7	65
Medium, coarse sand, and gravel	3	68
Coarse, and gravel	3	71
Medium	3	74

Well 24/4-17M1

Engineering Dept., test hole 7. About 1,300 ft N. and 5,100 ft W. of SE cor. Altitude 10 ft.

Medium to coarse	11	11
Medium silt	2	13
Clay	1	14
Clayey	5	19
Coarse	15	34
Medium to fine	2	36
Coarse, and wood	10	46
Medium to coarse	17	63
Medium to fine	11	74

Well 24/4-17P1

Engineering Dept., test hole 26. About 350 ft N. and 2,850 ft W. of SE cor. Altitude 15 ft.

Coarse	36	36
Blue-gray	6	42
Clayey	7	49
Sand, and gravel	5	54
Coarse, and gravel	15	69
Sand, medium gravel	3	72

Well 24/4-18B1

Bay Mill Co. About 1,300 ft S. and 2,850 ft E. of NW cor. Altitude about 10 ft.

	165	165
Cemented	95	260
Blue	70	330
Gravel	105	435
	23	458
	12	470
	30	500
Cemented	45	545
	17	562
S, bedded in clay	213	775

Table 7.--Drillers' logs of wells in northwest King County, Wash.--Continued

Material	Thickness (feet)	Depth (feet)
Well 24/4-18B1--Continued		
Sand	20	795
Clay with boulders	145	940
Clay, sandy	60	1,000
Sand, coarse	30	1,030
Clay and hard shale	197	1,227
Clay, soft	8	1,235
Shale, hard	80	1,315
Sand, coarse	31	1,346
Shale and boulders	69	1,415
Sand, coarse	104	1,519
Sand, hard	19	1,538
Gravel, cemented	12	1,550

Casing: 24-inch to 53 ft, 20-inch to 170 ft, 10-inch from 165 to 510 ft, 8-inch from 500 to 1,020 ft, 6-inch from 1,010 to 1,550 ft; perforated 410 to 510 ft, 980 to 1,020 ft, 1,350 to 1,550 ft.

Well 24/4-18Q1

Seattle Engineering Dept., test hole 1. About 450 ft N. and 3,500 ft E. of SW cor. Altitude about 5 ft.

Gravel and coarse sand	8	8
Sand, coarse	5	13
Sand, fine to medium	32	45
Sand, fine, trace of silt	12	57
Sand, medium to fine	39	96

Well 24/4-19H1

Liquid Carbonic Corp. About 140 ft S. and 140 ft W. of center of intersection of Hudson St. and Colorado Ave. Altitude about 15 ft. Drilled by N. C. Jamnsen Drilling Co., 1941.

Sand	250	250
Clay	62	312
Shale	319	631

Casing: 10-inch to 76 ft, 8-inch from 0 to 260 ft; perforations from 40 ft to 250(?) ft.

Well 24/4-20N1

Washington Highway Dept., test hole 1. About 350 ft N. and 50 ft E. of SW cor. Altitude about 6 ft.

Sand, medium, brown	9	9
Sand, medium, black, some gravel	7	16
Sand, medium to coarse, black, some gravel	17	33
Sand, medium to fine, black, some silt	39	72
Silt, gray	4	76
Sand, fine, black, silt layers	10	86
Sand, medium to fine, and sandy silt	16	102
Sand, medium to fine	18	120
Sand, fine, silty	33	153

ATTACHMENT B

RCRA Section 3012 Preliminary Assessment Program
Land Use and Demography

Prepared for JRB Associates by Shapiro and Associates

Site Name #48 LONE STAR CEMENT County 3801 E. MARGINAL WAY S.

SEATTLE

Sources

1. SEATTLE ROAD MAP - KROLL'S, RAND McNALLY, THOMAS ^{BROS.} KING
2. FIRM MAP, 1977
3. BOTTORFF, USFWS
4. USFWS, 1980
5. NWI MAP - SEATTLE SOUTH
6. 1980 CENSUS DATA
7. PSCOG, 1984

Distance/direction to a 5-acre (minimum) coastal wetland, if 2 miles or less

.25 MILE W TO DUWAMISH WATERWAY (CLASSIFIED AS ESTUARINE - OPEN WATER)

1 MILE SW TO ESTUARINE SHRUB/SCRUB AND EMERGENT WETLANDS

Source 5

Distance/direction to a 5-acre (minimum) freshwater wetland, if 1 mile or less

NONE

Source 5

Distance/direction to a critical habitat of an endangered species, if 1 mile or less

NONE

Source 3

Distance/direction to a National Wildlife Refuge, if 1 mile or less

NONE

Source 4

Resident and/or transient population within 1 mile of site

↓

↓

8,042 + 23,670 = 31,712

Source 6+7

Public or private facilities of particular concern (e.g., parks, schools) if within 1 mile or less

PARKS - PUGET PARK, PLAYFIELD AT 6th AND OREGON ST. S ; SCHOOLS - NONE ;
BUILDINGS - POST OFFICE, BN RAILROAD YARDS, TWO FIRE STATIONS

Source 1

Municipal sanitary sewer system and or storm sewers serving the facility?

METRO

Source _____

Ultimate discharge point(s) of above sewer systems

PUGET SOUND

Source _____

100-year flood potential at site

NONE - ZONE C

Source 2

RELEASE OF CONTAMINANTS VIA AIR ROUTE
(Complete only if directed by JRB)

Population within various radii of site:

1/4 mile _____

1 mile _____

1/2 mile _____

4 miles _____

Source _____

Distance/direction to a commercial/industrial area, if 1 mile or less

Source _____

Distance/direction to a national or state park, forest or wildlife refuge if 2 miles or less

Source _____

Distance/direction to a residential area if 2 miles or less

Source _____

Distance/direction to agricultural land in production within past five years, if 1 mile or less

Source _____

Distance/direction to prime agricultural land in production within past five years, if 2 miles or less

Source _____

Distance/direction of a historic or landmark site (National Register of Historic Places and National Natural Landmarks) if within 1 mile or less

Source _____